



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/156,761 | 09/18/1998 | ALEX MATUSEVICH | 2925-149P | 1477 |

30594 7590 07/09/2002
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 8910
RESTON, VA 20195

| |
|----------|
| EXAMINER |
|----------|

KWOH, JASPER C

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2663

DATE MAILED: 07/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/156,761 | MATUSEVICH, ALEX |
| | Examiner Jasper Kwoh | Art Unit 2663 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 May 2002.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,2,4-6 and 8-20 is/are rejected.
- 7) Claim(s) 3 and 7 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 5/1/02 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

| | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Drawings

1. The corrected or substitute drawings were received on 5/1/02. These drawings are acceptable.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 4-5, 8-19 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kay et al.

4. Regarding claim 1, Kay et al. disclose a radio comprising a modulator that modulates the carrier signal during active time slots (i.e. fig. 5b fi, carrier of the active time slot is modulated) and discontinues modulation during inactive time slots (i.e. fig. 5b fj, col. 8, ll. 6-11, modulation of inactive time slot is turned off); and a transmitter to transmit the carrier signal (fig. 1 is a base station functions by transmitting carrier signals).

5. Regarding claim 4, Kay et al. discloses a system that uses TDMA (i.e. fig. 2 shows that the signals transmitted are TDMA frames).

6. Regarding claim 5, Kay et al. disclose a method comprising modulating the carrier signal during active time slots (i.e. fig. 5b fi, carrier of the active time slot is modulated); discontinuing modulation during inactive time slots (i.e. fig. 5b fj, col. 8, ll. 6-11, modulation of inactive time slot is turned off); and wirelessly transmitting the carrier signal (fig. 1 is a base station functions by transmitting carrier signals).

7. Regarding claim 8, Kay et al. discloses a system that uses TDMA (i.e. fig. 2 shows that the signals transmitted are TDMA frames).
8. Regarding claim 9, Kay et al disclose a controller (CM) comprising means for providing transmit data (i.e. col. 5, 48-55 control receiving and transmission of radio frequency); means for modulating the carrier signal during active time slots (i.e. fig. 5b fi, carrier of the active time slot is modulated) and discontinuing modulation during inactive time slots (i.e. fig. 5b fj, col. 8, ll. 6-11, modulation of inactive time slot is turned off); and optimally organizing time slot so that each carrier signal has a minimum number of active (fig. 5b; time slots are moved to optimize the carrier signal and each carrier is organized without using excess time slots).
9. Regarding claim 10, Kay et al. discloses the nth time slot of a carrier signal is active and a nth time slot an adjacent carrier signal is inactive (i.e. fig. 5b, where fi has an active time slot, fj has an inactive time slot and fi is adjacent to fj).
10. Regarding claim 11, Kay et al. discloses a system that uses TDMA (i.e. fig. 2 shows that the signals transmitted are TDMA frames).
11. Regarding claim 12, Kay et al disclose a method comprising providing transmit data (i.e. col. 5, 48-55 control receiving and transmission of radio frequency); designating time slots and modulating the carrier signal during active time slots (i.e. fig. 5b fi, carrier of the active time slot is modulated) and discontinuing modulation during inactive time slots (i.e. fig. 5b fj, col. 8, ll. 6-11, modulation of inactive time slot is turned off); and optimally organizing time slot so that each carrier signal has a minimum

number of active (fig. 5b; time slots are moved to optimize the carrier signal and each carrier is organized without using excess time slots).

12. Regarding claim 13, Kay et al. discloses the nth time slot of a carrier signal is active and an nth time slot an adjacent carrier signal is inactive (i.e. fig. 5b, where f_i has an active time slot, f_j has an inactive time slot and f_i is adjacent to f_j).

13. Regarding claim 14, Kay et al. discloses a system that uses TDMA (i.e. fig. 2 shows that the signals transmitted are TDMA frames).

14. Regarding claim 15, Kay et al. disclose a article of manufacture comprising a segment for modulating the carrier signal during active time slots (i.e. fig. 5b f_i , carrier of the active time slot is modulated); a segment for discontinuing modulation during inactive time slots (i.e. fig. 5b f_j , col. 8, ll. 6-11, modulation of inactive time slot is turned off); and a segment for causing the computer to wirelessly transmitting the carrier signal (fig. 1 is a base station functions by transmitting carrier signals). It is inherent that there exist program for the system to perform the function.

15. Regarding claim 16, Kay et al. discloses a system that uses TDMA (i.e. fig. 2 shows that the signals transmitted are TDMA frames).

16. Regarding claim 17, Kay et al. disclose an article of manufacture comprising segment for providing transmit data (i.e. col. 5, 48-55 control receiving and transmission of radio frequency); segment for modulating the carrier signal during active time slots (i.e. fig. 5b f_i , carrier of the active time slot is modulated) and discontinuing modulation during inactive time slots (i.e. fig. 5b f_j , col. 8, ll. 6-11, modulation of inactive time slot is turned off); and segment for optimally organizing time slot so that each carrier signal

has a minimum number of active (fig. 5b; time slots are moved to optimize the carrier signal and each carrier is organized without using excess time slots). It is inherent that there exist some sort of program allowing the apparatus to perform the functions.

17. Regarding claim 18, Kay et al. discloses the nth time slot of a carrier signal is active and a nth time slot an adjacent carrier signal is inactive (i.e. fig. 5b, where f_i has an active time slot, f_j has an inactive time slot and f_i is adjacent to f_j).

18. Regarding claim 19, Kay et al. discloses a system that uses TDMA (i.e. fig. 2 shows that the signals transmitted are TDMA frames).

Claim Rejections - 35 USC § 103

19. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

20. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay et al.

21. Kay et al does not specifically disclose that the discontinuation of the modulation occurs gradually over at least a two-symbol time period. However, it would be desireable to control the discontinuing and giving it a bit of time allows the rest of the system to respond. Therefore it would have been obvious for an ordinary person skill in the art at the time of the invention to choose discontinuing over at least a two symbol time period with the method and system of Kay et al. in order to change modes without destabilizing the transmitting station.

22. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kay et al in view of applicant admitted prior art (APA).

23. Regarding claim 20, Kay et al. disclose segment for modulating the carrier signal during active time slots (i.e. fig. 5b fi, carrier of the active time slot is modulated) and discontinuing modulation during inactive time slots (i.e. fig. 5b fj, col. 8, ll. 6-11, modulation of inactive time slot is turned off). Kay et al. does not specifically disclose carrier signal with transmit data, sync data and CDL information. However, page 3, lines 21-24 applicant admitted that the carrier frequency signal includes three time slots each including a sync portion, a control and data portion and a CDL portion. Therefore, it would have been obvious to an ordinary person skilled in the art at the time of the invention to include the portions disclosed in APA with the signal embodied in carrier as disclosed in Kay et al. in order for the receiver to maintain synchronization.

Allowable Subject Matter

3. Claims 3 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 5/1/02 have been fully considered but they are not persuasive. Applicant asserts that Kay et al teaches turning off a carrier and not a time slot. Examiner respectfully disagrees. It is inherent that when the carrier is turned off, the whole channel would be off and not used. Therefore, the time slots will also be turned off. The claims still read on the reference and the rejections are maintained.

5. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies

(i.e., demodulating individual inactive time slots) are not recited in the rejected claim(s).

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Demodulating is different than not modulating!

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasper Kwoh whose telephone number is (703) 305-0101. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703)308-5340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

Jasper Kwoh
Examiner
Art Unit 2663

JK

JK
July 5, 2002

Chau T. Nguyen
CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600